## Note

## Apteraliplus parvulus (Roberts) (Coleoptera: Haliplidae) in the Pacific Northwest

Apteraliplus parvulus (Roberts) is a diminutive water beetle usually thought to occur only in Santa Clara and San Mateo counties of westcentral California (Doyen, J. T. 1984. Aquatic Coleoptera, pp. 361–437 in R. W. Merritt and K. W. Cummins, eds. An Introduction to the Aquatic Insects of North America. Kendall/Hunt Publ. Co., Dubuque, Iowa). Adults occur in the spring of the year and take advantage of temporarily flooded areas which are ordinarily dry the greater part of the year.

On 16 July 1989, a small series of A. parvulus was collected from a temporary cattle watering pool in Harney County Oregon ca 12 miles south of Riley. The pool, which was approximately  $20 \times 5$  m at that time of the year, was along the side of a road in open rangeland and had a mud base. There was no macrovegetation in the pool. It was typical of the artificial and naturally occurring depressions found throughout the arid region of southcentral Oregon. Water was muddy with a maximum depth of 25 cm. Numerous species of dytiscids and hydrophilids were also in the pool; however, there were very few Heteroptera. This was the only location, of four similar pools sampled within a 20 mile radius, in which A. parvulus was found.

On 13 July 1990 the same pool was visited in the hopes of obtaining quantitative biological information concerning the beetle and the microhabitat. Unfortunately, the pool was found to be dry. Again, several similar pools in the vicinity were examined without finding the beetle.

Other records of *A. parvulus* are available in the literature but have been difficult to substantiate. Hatch (Hatch, M. H. 1944. Bull. Brookl. Entomol. Soc. 39: 45–47) described *Haliplus wallisi* which he collected

at several locations in the arid Grand Coulee region of eastcentral Washington. The habitat he described is much like that in which I found the beetle. Eventually, Hatch (Hatch, M. H. 1953. The Beetles of the Pacific Northwest Part 1: Introduction and Adephaga. Univ. Wash. Publ. Biol. 16: 1-340) synonymized H. wallisi with A. parvulus in his treatment of the Pacific Northwest beetle fauna. I have examined the type of H. wallisi which is indeed a specimen of A. parvulus; I have labeled it as such. The type is from Steamboat Rock in the upper Grand Coulee region of Washington (probably collected in Grant Co.). In his work, Hatch recorded A. parvulus from northeastern Washington and western Oregon and called it locally common. However, beyond the type of H. wallisi, the only additional specimens from Oregon or Washington found were three from the Poe Valley of Klamath County, Oregon (US-NMNH). I could locate only one specimen of A. parvulus in the collection at Oregon State University (where the major portion of the Hatch material is deposited); it is labeled "Corvallis ?? Ore." The California Academy of Sciences only contains material from the two California counties previously mentioned.

It is probable that A. parvulus is more widespread than the few locations in central California, southcentral Oregon, and northcentral Washington where it has been collected. Unfortunately, the area where Hatch obtained his greatest number of specimens (Steamboat Rock in Washington) is now flooded by the development of Grand Coulee irrigation project. There are, however, hundreds of pools similar to those described by Hatch throughout eastern Washington and Oregon. A thorough examination of this

area, in the early spring, should provide new locations of A. parvulus.

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